

# PROTECTION SYSTEM AND METHOD AGAINST SHORT-CIRCUITS IN ELECTRIC POWER DISTRIBUTION ARCHITECTURES AT TWO VOLTAGE LEVELS

## Abstract

A protection system and method against short-circuits in electric power distribution architectures at two voltage levels, with a battery B1 and a second battery B2 at a higher voltage level, provided with automatic disconnection means SDB, and for differentiated supply of electric power to network sectors provided with power distribution units (10), (20), (30) to loads (12), (22), (23), (32), (33), said units (10), (20), (30) including a microcontroller (10a), (20a), (30a), said first battery B1 and sector or sectors it feeds being susceptible of being fed from the second battery B2, connected to a voltage generator by a converter DC/DC, comprising monitoring the voltage and current at the posts of said battery B1 and the state of the converter DC/DC, and if said state goes on to become a predetermined one and, then, said voltage and current levels exceed a threshold, microcontrollers (10a, 20a, 30a) are in-

formed by a communications network N to carry out a short-circuit protection process.